

[illegible]

SSSSSSSS SSSSSSSS SS SS SS SS SSSSSS SSSSSS SS SS SS SSSSSSSS SSSSSSSS	TTTTTTTTT TTTTTTTTT TT TT TT TT TT TT TT TT TT TT TT TT	AAAAAA AAAAAA AA AA AA AA AA AA AAAAAA AAAAAA AA AA AA AA AA	BBBBBBBB BBBBBBBB BB BB BB BB BBBBBBBB BBBBBBBB BB BB BB BB BBBBBBBB BBBBBBBB	AAAAAA AAAAAA AA AA AA AA AA AA AAAAAA AAAAAA AA AA AA AA AA	CCCCCCCC CCCCCCCC CC CC CC CC CC CC CC CC CC CCCCCCCC CCCCCCCC	CCCCCCCC CCCCCCCC CC CC CC CC CC CC CC CC CC CCCCCCCC CCCCCCCC	000000 000000 00 00 00 00 00 00 00 00 00 00 000000 000000	PPPPPPPP PPPPPPPP PP PP PP PP PPPPPPPP PPPPPPPP PP PP PP PP PP PP PP PP
LL LL LL LL LL LL LL LL LL LL LL LLLLLLLLLL LLLLLLLLLL	IIIIII IIIIII II II II II II II II II II IIIIII IIIIII	SSSSSSSS SSSSSSSS SS SS SS SS SSSSSS SSSSSS SS SS SS SSSSSSSS SSSSSSSS							

```
1 0001 0 MODULE STABACCOP(XTITLE 'Copy image file for Standalone BACKUP kit'
2 0002 0      MAIN = STABACCOP,
3 0003 0      IDENT = 'V04-000'
4 0004 0      ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1
8 0008 1 *****
9 0009 1 *
10 0010 1 *   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
11 0011 1 *   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
12 0012 1 *   ALL RIGHTS RESERVED.
13 0013 1 *
14 0014 1 *   THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
15 0015 1 *   ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
16 0016 1 *   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
17 0017 1 *   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
18 0018 1 *   OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
19 0019 1 *   TRANSFERRED.
20 0020 1 *
21 0021 1 *   THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
22 0022 1 *   AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
23 0023 1 *   CORPORATION.
24 0024 1 *
25 0025 1 *   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
26 0026 1 *   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1
31 0031 1
32 0032 1 ++
33 0033 1 FACILITY:
34 0034 1     General utility programs.
35 0035 1
36 0036 1 ABSTRACT:
37 0037 1     This program copies an image file, deleting the appended patch text.
38 0038 1     It is used and supported only for generation of Standalone BACKUP kits.
39 0039 1
40 0040 1 ENVIRONMENT:
41 0041 1     VAX/VMS user mode.
42 0042 1 --
43 0043 1
44 0044 1 AUTHOR: M. Jack, CREATION DATE: 16-Sep-1982
45 0045 1
46 0046 1 MODIFIED BY:
47 0047 1
48 0048 1     V03-002 CWH3002      CW Hobbs      4-Oct-1983
49 0049 1     Change CTG to CBT so that a segmented SYS does not have to
50 0050 1     be contiguous.
51 0051 1
52 0052 1     V03-001 CWH3001      CW Hobbs      8-Sep-1983
53 0053 1     Add the ability to segment a file, specifically so that
54 0054 1     SYS.EXE can be split across two volumes.
55 0055 1
56 0056 1 **
```



```
58 0057 1 LIBRARY 'SYS$LIBRARY:LIB';
59 0058 1
60 0059 1
61 0060 1 LITERAL
62 0061 1 TRUE= 1;
63 0062 1 FALSE= 0;
64 0063 1
65 0064 1
66 0065 1 STRUCTURE
67 0066 1 BBLOCK[O,P,S,E;N]=
68 0067 1 [N]
69 0068 1 (BBLOCK + 0)<P,S,E>;
70 0069 1
71 0070 1
72 0071 1 PSECT
73 0072 1 CODE= CODE,
74 0073 1 PLIT= CODE,
75 0074 1 OWN= DATA,
76 0075 1 GLOBAL= DATA;
77 0076 1
78 0077 1
79 0078 1 FORWARD ROUTINE
80 0079 1 STABACOP,
81 0080 1 FILE_ERROR: NOVALUE;
82 0081 1
83 0082 1
84 0083 1 EXTERNAL ROUTINE
85 0084 1 LIB$GET_FOREIGN: ADDRESSING_MODE(GENERAL),
86 0085 1 OT$SCVT_TI_L: ADDRESSING_MODE(GENERAL);
```

```

88 0086 1 ROUTINE STABACCOP=
89 0087 1
90 0088 1 ++
91 0089 1
92 0090 1 FUNCTIONAL DESCRIPTION:
93 0091 1 This routine is the main entry point for the STABACCOP program. It
94 0092 1 copies an image file, removing the appended patch text. It is used and
95 0093 1 supported only for generation of Standalone BACKUP kits.
96 0094 1
97 0095 1 INPUT PARAMETERS:
98 0096 1 Standard VMS activation parameters (not used).
99 0097 1
100 0098 1 IMPLICIT INPUTS:
101 0099 1 NONE
102 0100 1
103 0101 1 OUTPUT PARAMETERS:
104 0102 1 NONE
105 0103 1
106 0104 1 IMPLICIT OUTPUTS:
107 0105 1 NONE
108 0106 1
109 0107 1 ROUTINE VALUE:
110 0108 1 Completion status.
111 0109 1
112 0110 1 SIDE EFFECTS:
113 0111 1 NONE
114 0112 1
115 0113 1 --
116 0114 1
117 0115 2 BEGIN
118 0116 2 LOCAL
119 0117 2
120 0118 2 COMMAND_DESC: BBLOCK[DSC$K-S-BLN], | Descriptor for command buffer
121 0119 2 INFILE_DESC: BBLOCK[DSC$K-S-BLN], | Descriptor for input file name
122 0120 2 OUTFILE_DESC: BBLOCK[DSC$K-S-BLN], | Descriptor for output file name
123 0121 2 VAL_DESC: BBLOCK[DSC$K-S-BLN], | Descriptor for numeric value
124 0122 2 COMMAND_BUFFER: VECTOR[132,BYTE], | Command buffer
125 0123 2 P, | Pointer to space
126 0124 2 INPUT_FAB: $FAB_DECL, | FAB for input file
127 0125 2 INPUT_NAM: $NAM_DECL, | NAM block for input file
128 0126 2 INPUT_XAB: $XABFHC_DECL, | File header XAB for input file
129 0127 2 INPUT_RSA: VECTOR[NAM$C-MAXRSS,BYTE], | Resultant string for input file
130 0128 2 OUTPUT_FAB: $FAB_DECL, | FAB for output file
131 0129 2 OUTPUT_RAB: $RAB_DECL, | RAB for output file
132 0130 2 OUTPUT_NAM: $NAM_DECL, | NAM block for output file
133 0131 2 OUTPUT_RSA: VECTOR[NAM$C-MAXRSS,BYTE], | Resultant string for output file
134 0132 2 RETADR: VECTOR[2], | Return addresses from $CRMPSC
135 0133 2 IHD: REF BBLOCK, | Pointer to IHD
136 0134 2 IHP: REF BBLOCK, | Pointer to IHP
137 0135 2 FILE_SIZE, | Size of file copied
138 0136 2 BLOCKS_LEFT, | Number of blocks left to copy
139 0137 2 START_BLK, | Starting block (numbered 0 to N-1)
140 0138 2 SEGMENT_SIZE : INITIAL (99999), | Size of file segment
141 0139 2 INPUT_RSA_DESC: VECTOR[2], | Descriptor for input RSA
142 0140 2 OUTPUT_RSA_DESC: VECTOR[2], | Descriptor for output RSA
143 0141 2 STATUS_1, | Status return
144 0142 2 STATUS_2, | Status return
144 0142 2 LITERAL
```



```
145 0143 2 FACILITY = 103; ! Steal COPY's prefix
146 0144
147 0145
148 0146 ! Get the foreign command line. It must be of the form:
149 0147 ! <input-file-specification> <space> <output-file-specification> [ <space> <start-vbn> <space> <segmen
150 0148
151 0149 COMMAND_DESC[DSCSW_LENGTH] = %ALLOCATION(COMMAND_BUFFER);
152 0150 COMMAND_DESC[DSCSB_DTYPE] = DSCSK_DTYPE_T;
153 0151 COMMAND_DESC[DSCSB_CLASS] = DSCSK_CLASS_S;
154 0152 COMMAND_DESC[DSCSA_POINTER] = COMMAND_BUFFER;
155 0153 STATUS_1 = LIB$GET_FOREIGN(COMMAND_DESC, 0, COMMAND_DESC);
156 0154 IF NOT STATUS_1 THEN RETURN STATUS_1;
157 0155
158 0156
159 0157 ! Locate the space between the input and output file specifications.
160 0158
161 0159 P = CH$FIND_CH(.COMMAND_DESC[DSCSW_LENGTH], .COMMAND_DESC[DSCSA_POINTER], %C' ');
162 0160 IF .P EQL 0 THEN RETURN SS$BADPARAM;
163 0161 INFILE_DESC[DSCSW_LENGTH] = .P - .COMMAND_DESC[DSCSA_POINTER]; ! Set input name
164 0162 INFILE_DESC[DSCSA_POINTER] = .COMMAND_DESC[DSCSA_POINTER];
165 0163 COMMAND_DESC[DSCSA_POINTER] = .P + 1; ! Remove input name
166 0164 COMMAND_DESC[DSCSW_LENGTH] = .COMMAND_DESC[DSCSW_LENGTH] - 1 - .INFILE_DESC[DSCSW_LENGTH];
167 0165
168 0166 ! Locate the output file spec
169 0167
170 0168 P = CH$FIND_CH(.COMMAND_DESC[DSCSW_LENGTH], .COMMAND_DESC[DSCSA_POINTER], %C' ');
171 0169 IF .P EQL 0
172 0170 THEN
173 0171 BEGIN
174 0172 ! No optional numbers, the rest of the command string is the output file name
175 0173
176 0174 OUTFILE_DESC[DSCSW_LENGTH] = .COMMAND_DESC[DSCSW_LENGTH];
177 0175 OUTFILE_DESC[DSCSA_POINTER] = .COMMAND_DESC[DSCSA_POINTER];
178 0176 END
179 0177 ELSE
180 0178 BEGIN
181 0179 OUTFILE_DESC[DSCSW_LENGTH] = .P - .COMMAND_DESC[DSCSA_POINTER]; ! Set input name
182 0180 OUTFILE_DESC[DSCSA_POINTER] = .COMMAND_DESC[DSCSA_POINTER];
183 0181 COMMAND_DESC[DSCSA_POINTER] = .P + 1; ! Remove input name
184 0182 COMMAND_DESC[DSCSW_LENGTH] = .COMMAND_DESC[DSCSW_LENGTH] - 1 - .OUTFILE_DESC[DSCSW_LENGTH];
185 0183
186 0184 ! Now get the two optional numbers
187 0185
188 0186 P = CH$FIND_CH(.COMMAND_DESC[DSCSW_LENGTH], .COMMAND_DESC[DSCSA_POINTER], %C' ');
189 0187 IF .P EQL 0
190 0188 THEN
191 0189 RETURN SS$BADPARAM;
192 0190 VAL_DESC[DSCSW_LENGTH] = .P - .COMMAND_DESC[DSCSA_POINTER]; ! Set input name
193 0191 VAL_DESC[DSCSA_POINTER] = .COMMAND_DESC[DSCSA_POINTER];
194 0192 COMMAND_DESC[DSCSA_POINTER] = .P + 1; ! Remove input name
195 0193 COMMAND_DESC[DSCSW_LENGTH] = .COMMAND_DESC[DSCSW_LENGTH] - 1 - .VAL_DESC[DSCSW_LENGTH];
196 0194 IF NOT (STATUS_1 = 0) THEN CVT_TI_L(VAL_DESC, START_BLK)
197 0195 THEN
198 0196 RETURN STATUS_1;
199 0197 IF (START_BLK = .START_BLK-1) LSS 0
200 0198 THEN
201 0199
```

```
202 0200 3 RETURN SSS_BADPARAM;
203 0201 4 IF NOT (STATUS_1 = OTS$CVT_TI_L (COMMAND_DESC, SEGMENT_SIZE))
204 0202 THEN
205 0203 RETURN .STATUS_1;
206 0204 END;
207 0205
208 0206 ! Open the input file.
209 0207
210 P 0208 $FAB INIT(FAB=INPUT_FAB,
211 PP 0209 DNA=UPLIT BYTE('EXE'),
212 PP 0210 DNS=XCHARCOUNT('EXE'),
213 PP 0211 FNA=.INFILE_DESC[DSC$A_POINTER],
214 PP 0212 FNS=.INFILE_DESC[DSC$W_LENGTH],
215 PP 0213 FOP=UFO,
216 P 0214 NAM=INPUT_NAM,
217 0215 XAB=INPUT_XAB);
218 P 0216 $NAM INIT(NAM=INPUT_NAM,
219 P 0217 RSA=INPUT_RSA,
220 0218 RSS=NAM$C_MAXRSS);
221 0219 $XABFHC INIT(XAB=INPUT_XAB);
222 0220 IF NOT $OPEN(FAB=INPUT_FAB)
223 0221 THEN
224 0222 FILE_ERROR(FACILITY*16 + SHR$_OPENIN + STS$K_SEVERE, INPUT_FAB, INPUT_FAB);
225 0223
226 0224
227 0225 ! Ensure that the file has appropriate characteristics for an image file:
228 0226 ! sequential with fixed length 512 byte records and no record attributes.
229 0227
230 0228 IF .INPUT_FAB[FAB$B_ORG] NEQ FAB$C_SEQ
231 0229 OR .INPUT_FAB[FAB$B_RFM] NEQ FAB$C_FIX
232 0230 OR .INPUT_FAB[FAB$W_MRS] NEQ 512
233 0231 OR .INPUT_FAB[FAB$B_RAT] NEQ 0
234 0232 THEN
235 0233 BEGIN
236 0234 INPUT_FAB[FAB$L_STS] = SSS_BADIMGHDR;
237 0235 INPUT_FAB[FAB$L_STV] = 0;
238 0236 FILE_ERROR(FACILITY*16 + SHR$_OPENIN + STS$K_SEVERE, INPUT_FAB, INPUT_FAB);
239 0237 END;
240 0238
241 0239
242 0240 ! Map the file into memory.
243 0241
244 P 0242 STATUS_2 = $CRMPSC(
245 PP 0243 INADR=UPLIT(0, 0),
246 PP 0244 RETADR=RETADR,
247 P 0245 FLAGS=SEC$M_CRF OR SEC$M_EXPREG OR SEC$M_WRT,
248 0246 CHAN=.INPUT_FAB[FAB$L_STV]);
249 0247 IF NOT .STATUS_2
250 0248 THEN
251 0249 BEGIN
252 0250 INPUT_FAB[FAB$L_STS] = .STATUS_2;
253 0251 INPUT_FAB[FAB$L_STV] = 0;
254 0252 FILE_ERROR(FACILITY*16 + SHR$_OPENIN + STS$K_SEVERE, INPUT_FAB, INPUT_FAB);
255 0253 END;
256 0254
257 0255
258 0256 ! Examine the image header to determine the location of the patch text.
```



```
259 0257 2 !
260 0258 2 IHD = .RETADR[0];
261 0259 2 IF .IHD[IHDSW_PATCHOFF] NEQ 0
262 0260 2 THEN
263 0261 2 BEGIN
264 0262 2 IHP = .IHD + .IHD[IHDSW_PATCHOFF];
265 0263 2 IF .IHP[IHPSL_PATCOMTXT] NEQ 0
266 0264 2 THEN
267 0265 2 BEGIN
268 0266 2 INPUT_XAB[XAB$$_EBK] = .IHP[IHPSL_PATCOMTXT];
269 0267 2 INPUT_XAB[XAB$$_FFB] = 0;
270 0268 2 IHP[IHPSL_PATCOMTXT] = 0;
271 0269 2 END;
272 0270 2 END;
273 0271 2
274 0272 2 ! Determine the size of the output file
275 0273 2
276 0274 2 IF .INPUT_XAB[XAB$$_FFB] EQL 0
277 0275 2 THEN
278 0276 2 INPUT_XAB[XAB$$_EBK] = .INPUT_XAB[XAB$$_EBK] - 1;
279 0277 2 FILE_SIZE = MIN ((.INPUT_XAB[XAB$$_EBK] - .START_BLK), .SEGMENT_SIZE);
280 0278 2
281 0279 2 ! Create the output file.
282 0280 2
283 P 0281 2 $FAB_INIT(FAB=OUTPUT_FAB,
284 P 0282 2 ALQ=.FILE_SIZE,
285 P 0283 2 DNA=UPLIT_BYTE('EXE'),
286 P 0284 2 DNS=CHARCOUNT('EXE'),
287 P 0285 2 FAC=BIO,
288 P 0286 2 FNA=.OUTFILE_DESC[DSCSA_POINTER],
289 P 0287 2 FNS=.OUTFILE_DESC[DSCSW_LENGTH],
290 P 0288 2 FOP=<CTG,OFPS>,
291 P 0289 2 MRS=512,
292 P 0290 2 NAM=OUTPUT_NAM,
293 P 0291 2 ORG=SEQ,
294 P 0292 2 RFM=FIX);
295 P 0293 2 $RAB_INIT(RAB=OUTPUT_RAB,
296 P 0294 2 FAB=OUTPUT_FAB,
297 P 0295 2 ROP=BIO);
298 P 0296 2 $NAM_INIT(NAM=OUTPUT_NAM,
299 P 0297 2 RLF=INPUT_NAM,
300 P 0298 2 RSA=OUTPUT_RSA,
301 0299 2 RSS=NAM$C_MAXRSS);
302 0300 2 IF .SEGMENT_SIZE NEQ 99999 ! If segmenting, then don't need contiguous
303 0301 2 THEN
304 0302 2 BEGIN
305 0303 2 OUTPUT_FAB [FAB$V_CTG] = FALSE;
306 0304 2 OUTPUT_FAB [FAB$V_CBT] = TRUE;
307 0305 2 END;
308 0306 2 IF NOT $CREATE(FAB=OUTPUT_FAB)
309 0307 2 THEN
310 0308 2 FILE_ERROR(FACILITY*16 + SHR$_OPENOUT + STS$K_SEVERE, OUTPUT_FAB, OUTPUT_FAB);
311 0309 2 IF NOT $CONNECT(RAB=OUTPUT_RAB)
312 0310 2 THEN
313 0311 2 FILE_ERROR(FACILITY*16 + SHR$_OPENOUT + STS$K_SEVERE, OUTPUT_FAB, OUTPUT_RAB);
314 0312 2
315 0313 2
```



```
316 0314 2 ! Write the output file.
317 0315 2
318 0316 2 OUTPUT_RAB[RAB$L_RBF] = (.IHD + (.START_BLK*512));
319 0317 2 BLOCKS_LEFT = .FILE_SIZE;
320 0318 2 WHILE .BLOCKS_LEFT GTR 0 DO
321 0319 2     BEGIN
322 0320 2         LOCAL
323 0321 2             BLOCKS;
324 0322 2
325 0323 2             BLOCKS = MIN(.BLOCKS_LEFT, 127);
326 0324 2             BLOCKS_LEFT = .BLOCKS_LEFT - .BLOCKS;
327 0325 2             OUTPUT_RAB[RAB$W_RSZ] = .BLOCKS * 512;
328 0326 2             IF NOT $WRITE(RAB=OUTPUT_RAB)
329 0327 2                 THEN
330 0328 2                     FILE_ERROR(FACILITY*16 + SHR$WRITEERR + STS$K_SEVERE, OUTPUT_FAB, OUTPUT_RAB);
331 0329 2             OUTPUT_RAB[RAB$L_RBF] = .OUTPUT_RAB[RAB$L_RBF] + .OUTPUT_RAB[RAB$W_RSZ];
332 0330 2             END;
333 0331 2
334 0332 2 ! Close the output file.
335 0333 2
336 0334 2 IF NOT $CLOSE(FAB=OUTPUT_FAB)
337 0335 2 THEN
338 0336 2     FILE_ERROR(FACILITY*16 + SHR$_CLOSEOUT + STS$K_SEVERE, OUTPUT_FAB, OUTPUT_FAB);
339 0337 2
340 0338 2
341 0339 2 ! Log the copied message.
342 0340 2
343 0341 2 INPUT_RSA_DESC[0] = .INPUT_NAM[NAM$B_RSL];
344 0342 2 INPUT_RSA_DESC[1] = .INPUT_NAM[NAM$L_RSA];
345 0343 2 OUTPUT_RSA_DESC[0] = .OUTPUT_NAM[NAM$B_RSL];
346 0344 2 OUTPUT_RSA_DESC[1] = .OUTPUT_NAM[NAM$L_RSA];
347 0345 2 SIGNAL(FACILITY*16 + SHR$_COPIEDB + STS$K_SUCCESS, 3, INPUT_RSA_DESC, OUTPUT_RSA_DESC, .FILE_SIZE);
348 0346 2
349 0347 2
350 0348 2 ! Return with success.
351 0349 2
352 0350 2
353 0351 2 SSS_NORMAL
354 0352 1 END;
```

.TITLE STABACCOP Copy image file for Standalone BACKUP
kit

.IDENT \V04-000\

.PSECT CODE,NOWRT,2

45	58	45	2E	00000	P.AAA:	.ASCII	\.EXE\	:
00000000	00000000	00004	P.AAB:	.LONG	0, 0	:	:	:
45	58	45	2E	0000C	P.AAC:	.ASCII	\.EXE\	:

.EXTRN LIB\$GET_FOREIGN
.EXTRN OTS\$CVT_T1_L, SYSS\$OPEN
.EXTRN SYSS\$CRMPSC, SYSS\$CREATE
.EXTRN SYSS\$CONNECT, SYSS\$WRITE
.EXTRN SYSS\$CLOSE

```
03FC 00000 STABACCOP:
      59 00000000G 00 9E 00002 .WORD Save R2,R3,R4,R5,R6,R7,R8,R9 : 0086
      58 0000V CF 9E 00009 MOVAB OTSS$CVT_TI_L, R9
      5E FB6C CE 9E 0000E MOVAB FILE_ERROR, R8
      04 AE 0001869F 8F D0 00013 MOVAB -1172(SP), SP
      F8 AD 010E0084 8F D0 0001B MOVL #99999, SEGMENT SIZE : 0115
      FC AD FF5C CD 9E 00023 MOVL #17694852, COMMAND_DESC : 0149
      F8 AD 7E D4 0002C MOVAB COMMAND_BUFFER, COMMAND_DESC+4 : 0152
      F8 AD 9F 00029 PUSHAB COMMAND_DESC : 0153
      00000000G 00 03 FB 00031 CALLS #3, LIB$GET_FOREIGN
      52 50 D0 00038 MOVL R0, STATUS_T
      03 52 E8 0003B BLBS STATUS_1, TS : 0154
      FC BD F8 AD 00BA 31 0003E BRW 9$
      20 3A 00041 1$: LOCC #32, COMMAND_DESC, @COMMAND_DESC+4 : 0159
      02 12 00047 BNEQ 2$
      51 D4 00049 CLRL R1
      51 D5 0004B 2$: TSTL P : 0160
      66 13 0004D BEQL 6$
      F0 AD 51 FC AD A3 0004F SUBW3 COMMAND_DESC+4, P, INFILE_DESC : 0161
      F4 AD FC AD D0 00055 MOVL COMMAND_DESC+4, INFILE_DESC+4 : 0162
      50 AD 01 A1 9E 0005A MOVAB 1(R1), COMMAND_DESC+4 : 0163
      53 AD F8 AD 3C 0005F MOVZWL COMMAND_DESC, R0 : 0164
      50 AD 53 AD 3C 00063 MOVZWL INFILE_DESC, R3
      F8 AD 50 01 A3 0006A SUBL2 R3, R0
      FC BD F8 AD 20 3A 0006F SUBW3 #1, R0, COMMAND_DESC
      02 12 00075 LOCC #32, COMMAND_DESC, @COMMAND_DESC+4 : 0168
      51 D4 00077 CLRL R1
      51 D5 00079 3$: TSTL P : 0169
      0C 12 0007B BNEQ 4$
      E8 AD F8 AD B0 0007D MOVW COMMAND_DESC, OUTFILE_DESC : 0175
      EC AD FC AD D0 00082 MOVL COMMAND_DESC+4, OUTFILE_DESC+4 : 0176
      76 11 00087 BRB 10$ : 0169
      E8 AD 51 FC AD A3 00089 4$: SUBW3 COMMAND_DESC+4, P, OUTFILE_DESC : 0180
      EC AD FC AD D0 0008F MOVL COMMAND_DESC+4, OUTFILE_DESC+4 : 0181
      50 AD 01 A1 9E 00094 MOVAB 1(R1), COMMAND_DESC+4 : 0182
      53 AD F8 AD 3C 00099 MOVZWL COMMAND_DESC, R0 : 0183
      50 AD 53 AD 3C 0009D MOVZWL OUTFILE_DESC, R3
      F8 AD 50 01 A3 000A4 SUBL2 R3, R0
      FC BD F8 AD 20 3A 000A9 SUBW3 #1, R0, COMMAND_DESC
      02 12 000AF LOCC #32, COMMAND_DESC, @COMMAND_DESC+4 : 0187
      51 D4 000B1 CLRL R1
      51 D5 000B3 5$: TSTL P : 0188
      31 13 000B5 6$: BEQL 7$
      E0 AD 51 FC AD A3 000B7 SUBW3 COMMAND_DESC+4, P, VAL_DESC : 0191
      E4 AD FC AD D0 000BD MOVL COMMAND_DESC+4, VAL_DESC+4 : 0192
      50 AD 01 A1 9E 000C2 MOVAB 1(R1), COMMAND_DESC+4 : 0193
      51 AD F8 AD 3C 000C7 MOVZWL COMMAND_DESC, R0 : 0194
      50 AD 51 AD 3C 000CB MOVZWL VAL_DESC, R1
      F8 AD 50 01 A3 000CF SUBL2 R1, R0
      E0 5E DD 000D7 SUBW3 #1, R0, COMMAND_DESC
      E0 AD 9F 000D9 PUSHL SP : 0195
      69 02 FB 000DC PUSHAB VAL_DESC
      CALLS #2, -OTSS$CVT_TI_L
```

0050	8F	00	52	50	D0	000DF	MOVL	R0, STATUS_1	0198
			16	52	E9	000E2	BLBC	STATUS_1, 9\$	0200
			04	6E	F4	000E5	SOBGEQ	START_BLK, 8\$	
			50	14	D0	000E8	MOVL	#20, R0	
				04	04	000EB	RET		
		04		AE	9F	000EC	PUSHAB	SEGMENT_SIZE	0201
		F8		AD	9F	000EF	PUSHAB	COMMAND_DESC	
			69	02	FB	000F2	CALLS	#2, OTS\$CVT_TI_L	
			52	50	D0	000F5	MOVL	R0, STATUS_T	
			04	52	E8	000F8	BLBS	STATUS_1, 10\$	
			50	52	D0	000FB	MOVL	STATUS_1, R0	0203
				04	04	000FE	RET		
				2C	2C	000FF	MOVC5	#0, (SP), #0, #80, \$RMS_PTR	0215
			6E	00	CD	00106			
		FF0C	CD	8F	B0	00109	MOVW	#20483, \$RMS_PTR	
		5003	CD	8F	D0	00110	MOVL	#131072, \$RMS_PTR+4	
		00020000	CD	02	90	00119	MOVB	#2, \$RMS_PTR+22	
			CD	02	90	0011E	MOVB	#2, \$RMS_PTR+31	
		FE80	CD	CD	9E	00123	MOVAB	INPUT_XAB, \$RMS_PTR+36	
		FEAC	CD	CD	9E	0012A	MOVAB	INPUT_NAM, \$RMS_PTR+40	
		F4	CD	AD	D0	00131	MOVL	INFILE_DESC+4, \$RMS_PTR+44	
		FE85	CD	CF	9E	00137	MOVAB	P.AAA, \$RMS_PTR+48	
		F0	CD	AD	90	0013E	MOVB	INFILE_DESC, \$RMS_PTR+52	
			CD	04	90	00144	MOVB	#4, \$RMS_PTR+53	
			6E	00	2C	00149	MOVC5	#0, (SP), #0, #96, \$RMS_PTR	0218
				CD		00150			
		FEAC	CD	8F	B0	00153	MOVW	#24578, \$RMS_PTR	
		6002	CD	01	8E	0015A	MNEGB	#1, \$RMS_PTR+2	
		FEAE	CD	CE	9E	0015F	MOVAB	INPUT_RSA, \$RMS_PTR+4	
		FE80	CD	00	2C	00166	MOVC5	#0, (SP), #0, #44, \$RMS_PTR	0219
		0214	6E	CD		0016B			
				8F	B0	0016E	MOVW	#11293, \$RMS_PTR	
		FE80	CD	CD	9F	00175	PUSHAB	INPUT_FAB	0220
		2C1D	00	01	FB	00179	CALLS	#1, SYS\$OPEN	
		FF0C	11	50	E8	00180	BLBS	R0, 11\$	
				CD	9F	00183	PUSHAB	INPUT_FAB	0222
		0067109C		CD	9F	00187	PUSHAB	INPUT_FAB	
			68	8F	DD	0018B	PUSHL	#6754460	
				03	FB	00191	CALLS	#3, FILE_ERROR	
		FF29		CD	95	00194	TSTB	INPUT_FAB+29	0228
				16	12	00198	BNEQ	12\$	
		01	FF2B	CD	91	0019A	CMPB	INPUT_FAB+31, #1	0229
				0F	12	0019F	BNEQ	12\$	
		0200	8F	CD	B1	001A1	CMPW	INPUT_FAB+54, #512	0230
				06	12	001A8	BNEQ	12\$	
				CD	95	001AA	TSTB	INPUT_FAB+30	0231
		FF2A		1B	13	001AE	BEQL	13\$	
		FF14	CD	8F	9A	001B0	MOVZBL	#68, INPUT_FAB+8	0234
				CD	D4	001B6	CLRL	INPUT_FAB+12	0235
		FF18		CD	9F	001BA	PUSHAB	INPUT_FAB	0236
		FF0C		CD	9F	001BE	PUSHAB	INPUT_FAB	
		0067109C		8F	DD	001C2	PUSHL	#6754460	
			68	03	FB	001C8	CALLS	#3, FILE_ERROR	
				7E	7C	001CB	CLRQ	-(SP)	0246
				7E	7C	001CD	CLRQ	-(SP)	
		FF18		CD	DD	001CF	PUSHL	INPUT_FAB+12	
				7E	7C	001D3	CLRQ	-(SP)	

				0002000A	7E	D4	001D5	CLRL	-(SP)		
					8F	DD	001D7	PUSHL	#131082		
				40	7E	D4	001DD	CLRL	-(SP)		
				FE0E	AE	9F	001DF	PUSHAB	RETADR		
					CF	9F	001E2	PUSHAB	P.AAB		
00000000G	00				0C	FB	001E6	CALLS	#12, SYSSCRMPSC		
	1A				50	E8	001ED	BLBS	STATUS-2, 14\$		0247
FF14	CD				50	D0	001F0	MOVL	STATUS-2, INPUT_FAB+8		0250
				FF18	CD	D4	001F5	CLRL	INPUT_FAB+12		0251
				FF0C	CD	9F	001F9	PUSHAB	INPUT_FAB		0252
				FF0C	CD	9F	001FD	PUSHAB	INPUT_FAB		
				0067109C	8F	DD	00201	PUSHL	#6754460		
	68				03	FB	00207	CALLS	#3, FILE ERROR		
	56			18	AE	D0	0020A	14\$: MOVL	RETADR, IHD		0258
				08	A6	B5	0020E	TSTW	8(IHD)		0259
					19	13	00211	BEQL	15\$		
	50			08	A6	3C	00213	MOVZWL	8(IHD), IHP		0262
	50				56	C0	00217	ADDL2	IHD, IHP		
				20	A0	D5	0021A	TSTL	32(IHP)		0263
					0D	13	0021D	BEQL	15\$		
FE90	CD			20	A0	D0	0021F	MOVL	32(IHP), INPUT_XAB+16		0266
				FE94	CD	B4	00225	CLRW	INPUT_XAB+20		0267
				20	A0	D4	00229	CLRL	32(IHP)		0268
				FE94	CD	B5	0022C	15\$: TSTW	INPUT_XAB+20		0274
					04	12	00230	BNEQ	16\$		
				FE90	CD	D7	00232	DECL	INPUT_XAB+16		0276
50	FE90	CD			6E	C3	00236	16\$: SUBL3	START_BLK, INPUT_XAB+16, R0		0277
	04	AE			50	D1	0023C	CMPL	R0, SEGMENT_SIZE		
					04	15	00240	BLEQ	17\$		
				50	AE	D0	00242	MOVL	SEGMENT_SIZE, R0		
				57	50	D0	00246	17\$: MOVL	R0, FILE_SIZE		
0050	8F	00		6E	00	2C	00249	MOVCS	#0, (SP), #0, #80, \$RMS_PTR		0292
					CE		00250				
	01C4	CE		5003	8F	B0	00253	MOVW	#20483, \$RMS_PTR		
	01C8	CE	20100000		8F	D0	0025A	MOVL	#537919488, \$RMS_PTR+4		
	01D4	CE			57	D0	00263	MOVL	FILE_SIZE, \$RMS_PTR+16		
	01DA	CE			20	90	00268	MOVB	#32, \$RMS_PTR+22		
				01E1	CE	94	0026D	CLRB	\$RMS_PTR+29		
	01E3	CE			01	90	00271	MOVB	#1, \$RMS_PTR+31		
	01EC	CE		0120	CE	9E	00276	MOVAB	OUTPUT_NAM, \$RMS_PTR+40		
	01F0	CE		EC	AD	D0	0027D	MOVL	OUTFILE_DESC+4, \$RMS_PTR+44		
	01F4	CE		FD75	CF	9E	00283	MOVAB	P.AAC, \$RMS_PTR+48		
	01F8	CE		E8	AD	90	0028A	MOVB	OUTFILE_DEST, \$RMS_PTR+52		
	01F9	CE			04	90	00290	MOVB	#4, \$RMS_PTR+53		
	01FA	CE		0200	8F	B0	00295	MOVW	#512, \$RMS_PTR+54		
0044	8F	00			00	2C	0029C	MOVCS	#0, (SP), #0, #68, \$RMS_PTR		0295
					CE		002A3				
	0180	CE		0180	8F	B0	002A6	MOVW	#17409, \$RMS_PTR		
	0184	CE		0800	8F	3C	002AD	MOVZWL	#2048, \$RMS_PTR+4		
	01BC	CE		01C4	CE	9E	002B4	MOVAB	OUTPUT_FAB, \$RMS_PTR+60		
0060	8F	00			00	2C	002BB	MOVCS	#0, (SP), #0, #96, \$RMS_PTR		0299
					CE		002C2				
	0120	CE		6002	8F	B0	002C5	MOVW	#24578, \$RMS_PTR		
	0122	CE			01	8E	002CC	MNEGB	#1, \$RMS_PTR+2		
	0124	CE		20	AE	9E	002D1	MOVAB	OUTPUT_RSA, \$RMS_PTR+4		
	0130	CE		FEAC	CD	9E	002D7	MOVAB	INPUT_NAM, \$RMS_PTR+16		
0001869F	8F			04	AE	D1	002DE	CMPL	SEGMENT_SIZE, #99999		0300

01CA	CE	0A	13	002E6	BEQL	18\$	0303
01CA	CE	10	8A	002E8	BICB2	#16, OUTPUT_FAB+6	0304
		20	88	002ED	BISB2	#32, OUTPUT_FAB+6	0306
00000000G	00	CE	9F	002F2	PUSHAB	OUTPUT_FAB	
	11	01	FB	002F6	CALLS	#1, SYS\$CREATE	
		50	E8	002FD	BLBS	R0, 19\$	0308
		CE	9F	00300	PUSHAB	OUTPUT_FAB	
		CE	9F	00304	PUSHAB	OUTPUT_FAB	
	68	01C4	8F	DD 00308	PUSHL	#6754488	
		01C8	03	FB 0030E	CALLS	#3, FILE ERROR	0309
00000000G	00	0180	CE	9F 00311	PUSHAB	OUTPUT_RAB	
	11		01	FB 00315	CALLS	#1, SYS\$CONNECT	
			50	E8 0031C	BLBS	R0, 20\$	0311
		0180	CE	9F 0031F	PUSHAB	OUTPUT_RAB	
		01C8	CE	9F 00323	PUSHAB	OUTPUT_FAB	
	68	006710A4	8F	DD 00327	PUSHL	#6754488	
			03	FB 0032D	CALLS	#3, FILE ERROR	
01A8	50		09	78 00330	ASHL	#9, START_BLK, R0	0316
CE	50		56	C1 00334	ADDL3	IHD, R0, OUTPUT_RAB+40	
	52		57	D0 0033A	MOVL	FILE_SIZE, BLOCKS_LEFT	0317
			52	D5 0033D	TSTL	BLOCKS_LEFT	0318
			46	15 0033F	BLEQ	24\$	
	50		52	D0 00341	MOVL	BLOCKS_LEFT, R0	0323
0000007F	8F		50	D1 00344	CMPL	R0, #127	
			04	15 00348	BLEQ	22\$	
	50	7F	8F	9A 0034D	MOVZBL	#127, R0	
	52		50	C2 00351	SUBL2	BLOCKS, BLOCKS_LEFT	0324
01A2	CE	0200	8F	A5 00354	MULW3	#512, BLOCKS, OUTPUT_RAB+34	0325
		0180	CE	9F 0035C	PUSHAB	OUTPUT_RAB	0326
00000000G	00		01	FB 00360	CALLS	#1, SYS\$WRITE	
	11		50	E8 00367	BLBS	R0, 23\$	
		0180	CE	9F 0036A	PUSHAB	OUTPUT_RAB	0328
		01C8	CE	9F 0036E	PUSHAB	OUTPUT_FAB	
	68	006710D4	8F	DD 00372	PUSHL	#67545T6	
			03	FB 00378	CALLS	#3, FILE ERROR	
01A8	50	01A2	CE	3C 0037B	MOVZWL	OUTPUT_RAB+34, R0	0329
CE			50	C0 00380	ADDL2	R0, OUTPUT_RAB+40	
		01C4	B6	11 00385	BRB	21\$	0318
00000000G	00		CE	9F 00387	PUSHAB	OUTPUT_FAB	0335
	11		01	FB 0038B	CALLS	#1, SYS\$CLOSE	
		01C4	50	E8 00392	BLBS	R0, 25\$	
		01C8	CE	9F 00395	PUSHAB	OUTPUT_FAB	0337
		0067105C	CE	9F 00399	PUSHAB	OUTPUT_FAB	
	68		8F	DD 0039D	PUSHL	#6754396	
		FEAF	03	FB 003A3	CALLS	#3, FILE ERROR	
10	AE	FEBO	CD	9A 003A6	MOVZBL	INPUT_NAM+3, INPUT_RSA_DESC	0342
14	AE	0123	CD	D0 003AC	MOVL	INPUT_NAM+4, INPUT_RSA_DESC+4	0343
08	AE	0124	CE	9A 003B2	MOVZBL	OUTPUT_NAM+3, OUTPUT_RSA_DESC	0344
0C	AE		CE	D0 003B8	MOVL	OUTPUT_NAM+4, OUTPUT_RSA_DESC+4	0345
			57	DD 003BE	PUSHL	FILE_SIZE	0346
		0C	AE	9F 003C0	PUSHAB	OUTPUT_RSA_DESC	
		18	AE	9F 003C3	PUSHAB	INPUT_RSA_DESC	
			03	DD 003C6	PUSHL	#3	
00000000G	00	00671061	8F	DD 003C8	PUSHL	#6754401	
	50		05	FB 003CE	CALLS	#5, LIB\$SIGNAL	
			01	D0 003D5	MOVL	#1, R0	0352
			04	003D8	RET		

STABACCOP
V04-000

Copy image file for Standalone BACKUP kit

F 15
16-Sep-1984 00:57:22
14-Sep-1984 11:54:04

VAX-11 Bliss-32 V4.0-742
[BACKUP.SRC]STABACCOP.B32;1

Page 12
(3)

; Routine Size: 985 bytes, Routine Base: CODE + 0010


```
356 0353 1 ROUTINE FILE_ERROR(MESSAGE,FAB,FRAB): NOVALUE=
357 0354 1
358 0355 1 !++
359 0356 1
360 0357 1 FUNCTIONAL DESCRIPTION:
361 0358 1 This routine handles signalling of file-related errors.
362 0359 1
363 0360 1 INPUT PARAMETERS:
364 0361 1 MESSAGE - Message code to be signalled.
365 0362 1 FAB - FAB for the file, to obtain the file specification.
366 0363 1 FRAB - FAB or RAB that sustained the error, to obtain
367 0364 1 STS and STV.
368 0365 1
369 0366 1 IMPLICIT INPUTS:
370 0367 1 NONE
371 0368 1
372 0369 1 OUTPUT PARAMETERS:
373 0370 1 NONE
374 0371 1
375 0372 1 IMPLICIT OUTPUTS:
376 0373 1 NONE
377 0374 1
378 0375 1 ROUTINE VALUE:
379 0376 1 NONE
380 0377 1
381 0378 1 SIDE EFFECTS:
382 0379 1 Message signalled.
383 0380 1
384 0381 1 !--
385 0382 1
386 0383 2 BEGIN
387 0384 2 MAP
388 0385 2 FAB: REF BBLOCK, ! Pointer to FAB
389 0386 2 FRAB: REF BBLOCK; ! Pointer to FAB or RAB
390 0387 2 LOCAL
391 0388 2 NAM: REF BBLOCK, ! Pointer to NAM block
392 0389 2 DESC: VECTOR[2]; ! Descriptor for file specification
393 0390 2
394 0391 2 ! Set up the file name descriptor.
395 0392 2 !
396 0393 2 !
397 0394 2 NAM = .FAB[FAB$S_NAM];
398 0395 2 IF .NAM[NAM$B_RSC] NEQ 0
399 0396 2 THEN
400 0397 2 BEGIN
401 0398 2 DESC[0] = .NAM[NAM$B_RSL];
402 0399 2 DESC[1] = .NAM[NAM$S_RSA];
403 0400 2 END
404 0401 2 ELSE IF .NAM[NAM$B_ESL] NEQ 0
405 0402 2 THEN
406 0403 2 BEGIN
407 0404 2 DESC[0] = .NAM[NAM$B_ESL];
408 0405 2 DESC[1] = .NAM[NAM$S_ESA];
409 0406 2 END
410 0407 2 ELSE
411 0408 2 BEGIN
412 0409 2 DESC[0] = .FAB[FAB$B_FNS];
```

```
: 413      0410 3      DESC[1] = .FAB[FAB$L_FNA];  
: 414      0411 2      END;  
: 415      0412 2  
: 416      0413 2  
: 417      0414 2      ! Signal the message.  
: 418      0415 2      !  
: 419      0416 2      SIGNAL(.MESSAGE, 1, DESC, .FRAB[FAB$L_STS], .FRAB[FAB$L_STV]);  
: 420      0417 1      END;
```

0000 00000 FILE_ERROR:						
	5E	08	C2 00002	.WORD	Save nothing	: 0353
	51	08	AC D0 00005	SUBL2	#8, SP	: 0394
	50	28	A1 D0 00009	MOVL	FAB, R1	
		03	A0 95 0000D	MOVL	40(R1), NAM	: 0395
			0B 13 00010	TSTB	3(NAM)	
	6E	03	A0 9A 00012	BEQL	1\$: 0398
04	AE	04	A0 D0 00016	MOVZBL	3(NAM), DESC	: 0399
			19 11 0001B	MOVL	4(NAM), DESC+4	: 0395
		0B	A0 95 0001D	BRB	3\$: 0401
			0B 13 00020	TSTB	11(NAM)	
	6E	0B	A0 9A 00022	BEQL	2\$: 0404
04	AE	0C	A0 D0 00026	MOVZBL	11(NAM), DESC	: 0405
			09 11 0002B	MOVL	12(NAM), DESC+4	: 0401
	6E	34	A1 9A 0002D	BRB	3\$: 0409
04	AE	2C	A1 D0 00031	MOVZBL	52(R1), DESC	: 0410
	50	0C	AC D0 00036	MOVL	44(R1), DESC+4	: 0416
	7E	08	A0 7D 0003A	MOVL	FRAB, R0	
		08	AE 9F 0003E	MOVQ	8(R0), -(SP)	
			01 DD 00041	PUSHAB	DESC	
		C4	AC DD 00043	PUSHL	#1	
00000000G 00		05	FB 00046	PUSHL	MESSAGE	
		04	0004D	CALLS	#5, LIB\$SIGNAL	: 0417
				RET		

; Routine Size: 78 bytes, Routine Base: CODE + 03E9

STABACCOP
V04-000

Copy image file for Standalone BACKUP kit

I 15
16-Sep-1984 00:57:22
14-Sep-1984 11:54:04

VAX-11 Bliss-32 V4.0-742
[BACKUP.SRC]STABACCOP.B32;1

Page 15
(5)

: 422 0418 1 END
: 423 0419 0 ELUDOM

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

:
: Name Bytes Attributes
: CODE 1079 NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPI,ALIGN(2)

Library Statistics

:
: File Total Symbols Loaded Percent Pages Mapped Processing Time
: _\$255\$DUA28:[SYSLIB]LIB.L32;1 18619 126 0 1000 00:01.9

COMMAND QUALIFIERS

:
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:STABACCOP/OBJ=OBJ\$:STABACCOP MSRC\$:STABACCOP/UPDATE=(ENH\$:STABACCOP)

: Size: 1063 code + 16 data bytes
: Run Time: 00:21.6
: Elapsed Time: 01:14.2
: Lines/CPU Min: 1162
: Lexemes/CPU-Min: 35087
: Memory Used: 280 pages
: Compilation Complete

0015 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY

